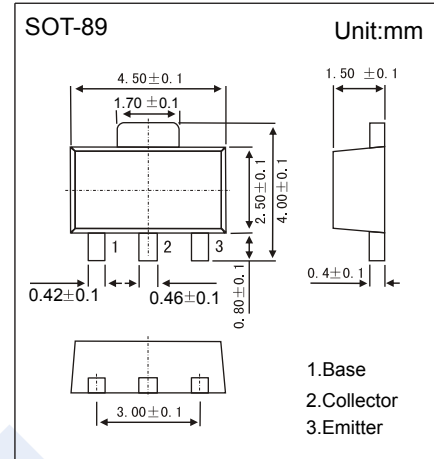


NPN Transistors

2SC3617

■ Features

- Collector Current Capability $I_C=0.3A$
- Collector Emitter Voltage $V_{CEO}=50V$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	50	V
Collector - Emitter Voltage	V_{CEO}	50	
Emitter - Base Voltage	V_{EBO}	15	
Collector Current - Continuous	I_C	0.3	A
Collector Current - Pulse (Note.1)	I_{CP}	0.5	
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

Note.1 : $PW \leq 10ms, Duty\ Cycle \leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E = 0$	50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 mA, I_B = 0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu A, I_C = 0$	15			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 50 V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 10 V, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 mA, I_B = 1 mA$			0.13	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 mA, I_B = 1 mA$			1.2	
DC current gain	h_{FE}	$V_{CE} = 5V, I_C = 100mA$	800		3200	
		$V_{CE} = 5V, I_C = 300mA$	640			
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		8		μF
Transition frequency	f_t	$V_{CE} = 5V, I_E = -50mA$	150			MHz

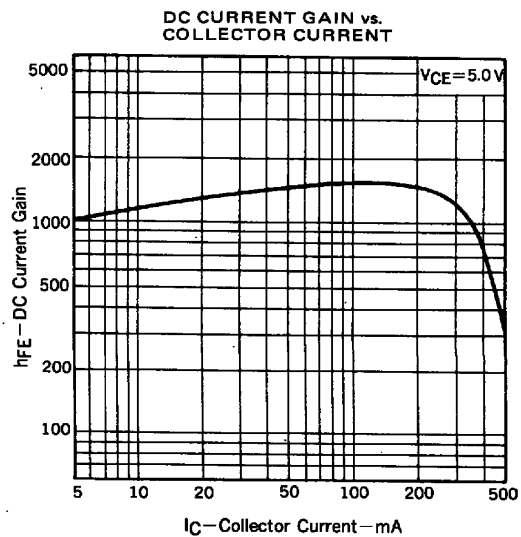
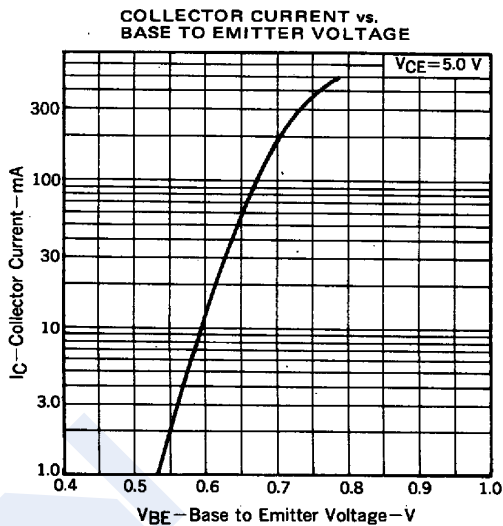
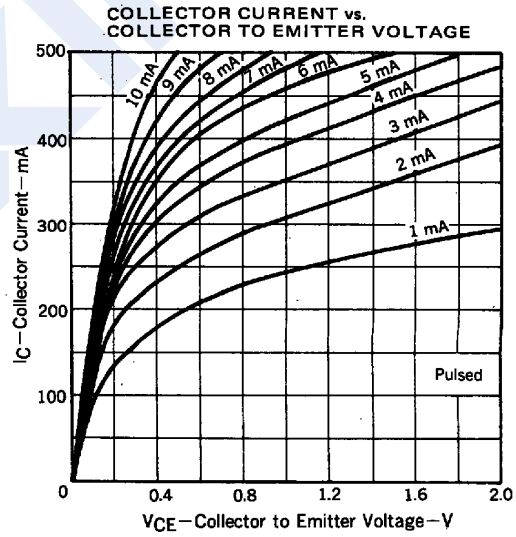
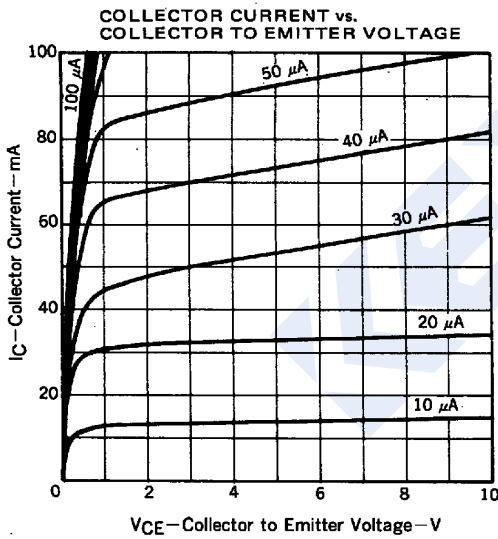
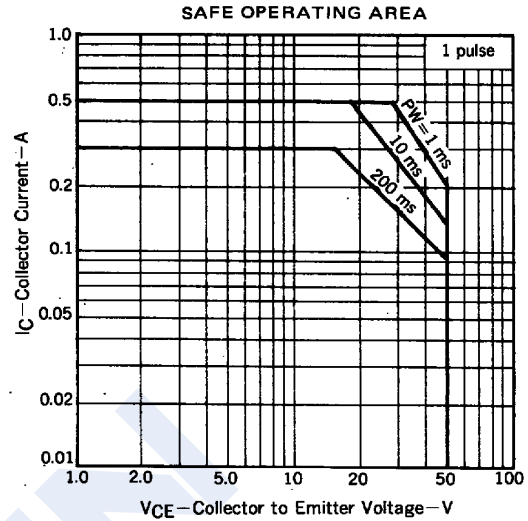
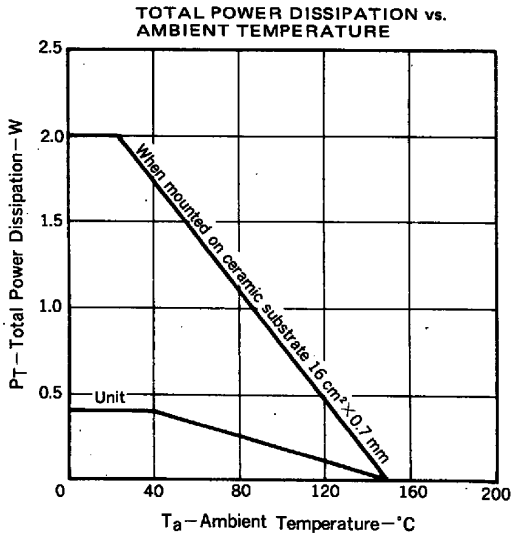
■ Classification of $h_{fe}(1)$

Type	2SC3617-M	2SC3617-L	2SC3617-K
Range	800-1600	1200-2400	2000-3200
Marking	TM	TL	TK

NPN Transistors

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■ Typical Characteristics



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■ Typical Characteristics

